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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

In the Matter of )
Parts 1, 2, 21 and 94 of the )
Rules to Establish a New )
Part 101 Governing Terrestrial )
Microwave Fixed Radio Services )

WT Docket No. 94-148

To: The Commission

#### MCI REPLY COMMENTS

MCI Telecommunications Corporation (MCI), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, 1/2 respectfully submits the following reply comments in response to the Commission's Notice of Proposed Rulemaking (NPRM), FCC 94-314, released December 28, 1994.

The NPRM proposes to simplify and consolidate the domestic common carrier fixed radio rules in Part 21 (47 CFR Part 21) and the private operational fixed microwave rules in Part 94 (47 CFR Part 94) into a new Part 101 entitled Fixed Microwave Services. The Commission's goal is to treat similar issues in the two present rule parts in the same way insofar as possible, eliminate redundancy and remove obsolete language (NPRM, Paragraph 1). The Commission has achieved this goal to a very substantial extent, particularly in light of the scope of the task. Therefore, MCI supports the new Part 101 rules and the suggestions contained in the joint reply comments submitted by the Telecommunications

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<sup>47</sup> C.F.R. Section 1.415.

Industry Association (TIA) and National Spectrum Managers Association (NSMA).

The Fixed Point-to-Point Communications Section, Network Equipment Division of the TIA and the NSMA are filing joint reply comments on the NPRM. In these joint reply comments, TIA and NSMA highlight the general support in the initial comments for the Commission's proposals and request that the Commission adopt certain changes to the proposed Part 101 which would ensure that private and common carrier fixed point-to-point microwave licensees could continue serving the public interest. MCI has been involved actively with TIA and NSMA in developing these proposals. MCI enthusiastically supports the proposals and urges their prompt adoption.

Specifically, TIA and NSMA propose that the Commission, as part of the NPRM, revise the proposed rules so that: (i) private and common carrier fixed point-to-point microwave licensees are treated the same; (ii) certain rules -- specifically those governing frequency coordination, interference protection, transition to a new Part 101, and construction -- promote spectral efficiency and provide interference protection; and (iii) equipment-related rules, such as those governing antenna standards and automatic transmitter power control (ATPC), reflect industry standards.

## EOUAL TREATMENT FOR PRIVATE AND COMMON CARRIER LICENSEES

Private and common carrier fixed point-to-point microwave licensees are unique in many ways. These differences should be reflected, where appropriate, in the new Part 101 rules. Nevertheless, to fulfill the Commission's objectives as described in the NPRM, it is essential that all licensees generally be subject to the same technical standards:

- All technical rules governing Part 21 and Part 94 fixed point-to-point microwave licensees should be consolidated into the proposed Subpart C (Technical Standards). All technical rules in either Subpart H (Private Operational Fixed Microwave Service) or Subpart I (Point-to-Point Microwave Radio Service) should be deleted. The frequency tables in Subpart H and Subpart I should be combined into a single table (the new Section 101.147 proposed by TIA/NSMA) in Subpart C.
- All non-technical rules applicable to private carrier and common carrier services, such as eligibility and permissible communications, should remain in Subparts H and I, respectively. In addition, Section 101.3 should be revised to include specific definitions for Private Operational Fixed Point-to-Point Microwave Service and for Common Carrier Fixed Point-to-Point Microwave Service. Subparts H and I, respectively, should be renamed accordingly.
- Private and common carriers should be subject to the same application, authorization, and construction rules. In the NPRM, the Commission does not propose such equal treatment. Private licensees should be: (i) eligible for temporary fixed authorizations in the same manner as common carriers are in proposed Sections 101.715 and 101.717 (see proposed Section 101.31); (ii) subject to a single set of application content requirements, which will require an applicant to specify the equipment (including antennas) for its system in the application; and (iii) required to use the same application forms. Under Part 101, common carriers should be able to construct, but not operate, prior to licensing in the same manner as private licensees (as proposed in pending CC Docket No. 93-2).

#### LICENSEE RELATED ISSUES

While the proposals in Part 101 significantly improve the ability of users to operate in a spectrally efficient, interference-free environment, the Commission should clarify and revise certain of these proposals to optimize their utility:

- Standards for determining what constitutes a major amendment (Section 101.29) and for determining how to process modification applications (Sections 101.57, 101.59, 101.61) should be revised to reflect industry usage.
- The construction period for both private and common carriers should be 18 months instead of 12 months (Section 101.63). This increase is necessary to protect licensees in case of weather problems or in case of the anticipated shortage of resources (e.g., tower sites, construction crews, engineering consultants, and equipment) resulting from the influx of personal communications service (PCS) applicants and re-located 2 GHz fixed licensees.
- A transition period to Part 101 should be adopted. Part 101 makes substantive changes to rules in Parts 21 and 94, affecting interference protection, frequency coordination, digital loading standards and antenna requirements. TIA and NSMA propose that the Commission establish an effective date for Part 101, and that all existing licensees or pending applicants (including applications for modifications and expansions) as of that date are grandfathered under Parts 21 and 94.
- The proposed frequency coordination (Section 101.103), interference protection (Section 101.105) and frequency tolerance (Section 101.107) rules generally are accept-However, the Commission should: (i) clarify that able. the frequency coordination rules apply both to private and common carriers; (ii) prescribe interference dispute resolution mechanisms to safeguard licensees as PCS facilities are licensed; (iii) permit relaxation of interference criteria if both parties consent (as is done currently under Section 94.15(b)(2)); (iv) define the practical threshold for determining acceptable analog interference under Section 101.105(b), based upon Bulletin 10-F or any other suitable engineering standard; and (v) revise the frequency tolerance rule to include specifications for the 4, lower 6, and 11 GHz bands and for heterodyne equipment.

Minimum capacity and loading requirements should be revised. Analog modulation requirements should be specified. Digital modulation specifications should apply to frequencies below 19.7 GHz, rather than apply the 15 GHz threshold proposed in Section 101.141. Loading requirements should apply only to commercially available equipment. Voice channel requirements for digital transmission equipment should be eliminated.

#### EOUIPMENT ISSUES

The proposed Part 101 rules encompass several equipment-related issues. Certain of these proposals should be revised:

- In Section 101.115, changes should be made to cover fixed stations operating at 900 MHz or higher and to clarify the requirements for antenna upgrades so that antenna upgrades can be requested and paid for be the appropriate party. In Section 101.117, antenna polarization should be defined to include only vertical or horizontal polarization, which is consistent with standard industry usage.
- ATPC is an essential tool in maximizing the number of microwave systems that can be engineered in a particular geographic area. The Commission's failure to propose authorization of ATPC in Part 101 should be revisited. When ATPC is used consistent with industry guidelines established in TIA Bulletin 10-F, the maximum power would be specified in the license, but the licensee would have the option to reduce power to the extent necessary to optimize the number of paths that could be established. Most of the time, the user operates at the lower power and the maximum, licensed power is used only when necessary. Thus, use of ATPC does not require any change in Commission record keeping, licensing or filing requirements. Permitting ATPC in Part 101, Subpart C would make this useful tool available to private carriers for the first time.
- Station record keeping requirements must be retained to ensure proper operation and to facilitate problem correction.

Adoption of a uniform set of rules for private and common carrier fixed point-to-point microwave licensees and applicants is timely

and critical. Private and common carrier licensees increasingly share many frequency bands, including the five (5) bands above 3 GHz recently reallocated to accommodate users which must relocate to clear spectrum for emerging technologies, including PCS.

The Part 101 technical rules should be in place before PCS licenses are granted and before the 2 GHz users commence relocation. These rules are needed to guide how the former 2 GHz fixed licensees will operate in the new bands. If such rules are not in place, implementation of PCS could be delayed significantly due to a backlog of 2 GHz relocation applications, waiver requests by such applicants, and uncertainty over which rules apply.

When reallocating the bands above 3 GHz in the <u>Second Report</u> and <u>Order</u> in ET Docket No. 92-9, the Commission expressly postponed consideration of various permanent technical rules for Part 21 and Part 94 licensees. The importance of adopting the technical recommendations made in the TIA/NSMA joint comments cannot be overemphasized. These rules should have been adopted in the <u>Second Report and Order</u>, but the Commission decided to wait until initiating the rulemaking for consolidating Parts 21 and 94. The entire fixed point-to-point microwave industry has relied on the Commissions promise to consider the technical

Redevelopment of Spectrum to Encourage Innovation In the Use of New Telecommunications Technologies, Second Report and Order, ET Docket No. 92-9, 8 FCC Rcd 6495,6519-20 (1993) ("Second Report and Order"), modified, Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994).

proposals deferred form ET Docket No. 92-9 and has waited over 18 months for this opportunity to re-submit them.

With minor exceptions, the TIA/NSMA proposals repeat the ET Docket No. 92-9 proposals and thus must be considered fully and adopted in this proceeding. Any further delay would be contrary to the public interest, as the effect would be to disrupt deployment of PCS (including the attendant relocation of 2 GHz fixed microwave users), and to create unnecessary impediments to the continued availability of all fixed point-to-point microwave radio services.

#### CONCLUSION

The Commission and its staff are to be commended on the efforts put forth to create a comprehensive new Part 101. The Commission should adopt the new rule Part, subject to the few suggestions made by MCI and the joint reply comments by TIA/NSMA.

Respectfully submitted,

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Dated: March 17, 1995

### CERTIFICATE OF SERVICE

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